# THE OFFICE OF REGULATORY STAFF DIRECT TESTIMONY & EXHIBITS

**OF** 

### MICHAEL L. SEAMAN-HUYNH

**MARCH 23, 2018** 



**DOCKET NO. 2018-2-E** 

Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company

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1		DIRECT TESTIMONY AND EXHIBITS OF
2		MICHAEL L. SEAMAN-HUYNH
3		ON BEHALF OF
4		THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF
5		DOCKET NO. 2018-2-E
6		IN RE: ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS FOR
7		SOUTH CAROLINA ELECTRIC & GAS COMPANY
8		
9	Q.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.
10	<b>A.</b>	My name is Michael Seaman-Huynh. My business address is 1401 Main Street
11		Suite 900, Columbia, South Carolina 29201. I am employed by the State of South Carolina
12		as a Senior Regulatory Manager in the Utility Rates and Services Division of the Office of
13		Regulatory Staff ("ORS").
14	Q.	PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.
15	<b>A.</b>	I received my Bachelor's Degree from the University of South Carolina in 1997
16		Prior to my employment with ORS, I was employed as an energy analyst with a private
17		consulting firm. I joined ORS in 2006 as an Electric Utilities Specialist and was promoted
18		to Senior Electric Utilities Specialist in 2010. When the Energy Regulation Department
19		was formed in August 2015, I assumed the position of Senior Regulatory Analyst. In May
20		2016, the Utility Rates and Services Division was formed, and I was promoted to the
21		position of Senior Regulatory Manager.
22	Q.	HAVE YOU TESTIFIED BEFORE THE PUBLIC SERVICE COMMISSION OF
23		SOUTH CAROLINA ("COMMISSION")?

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<b>A.</b>	Yes. I have testified on numerous occasions before the Commission in connection
	with hearings concerning fuel clauses, general rate cases, and Utility Facility Siting and
	Environmental Protection Act proceedings.

#### Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

The purpose of my testimony is to set forth the ORS's recommendations resulting from our examination and review of South Carolina Electric & Gas Company's ("SCE&G" or "Company") fuel expenses and power plant operations used in the generation of electricity to meet the Company's retail customer requirements during the review period. The review period includes the actual data for January 2017 through December 2017 ("Actual Period"), estimated data for January 2018 through April 2018 ("Estimated Period"), and forecasted data for May 2018 through April 2019 ("Forecasted Period").

# WHAT DID YOUR REVIEW OF THE COMPANY'S FUEL EXPENSES AND PLANT OPERATIONS INVOLVE?

ORS examined various fuel and performance related documents as part of our review. These documents addressed the Company's electric generation and power plant outage and maintenance activities. In preparation for this proceeding, ORS analyzed the Company's monthly fuel reports including power plant performance data, unit outages and generation statistics. ORS examined the Company's contracts for nuclear fuel, coal, natural gas, fuel oil, transportation, and environmental reagents. ORS also evaluated the Company's policies and procedures for fuel procurement. All information was reviewed with reference to the Company's existing Adjustment for Fuel, Variable Environmental, Avoided Capacity, S.C. Code Ann. §58-27-865 (2015) (the "Fuel Clause Statute"), and the approved South Carolina Distributed Energy Resource Program ("DERP"). Additionally,

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1	ORS attended the March 28, 2017, Nuclear Regulatory Commission ("NRC") 2016 post-
2	annual inspection meeting for the V.C. Summer Nuclear Station ("V.C. Summer").

# 3 Q. WHAT ADDITIONAL STEPS WERE TAKEN IN ORS'S REVIEW OF THE 4 COMPANY'S PROPOSAL IN THIS PROCEEDING?

ORS met with Company personnel from various departments to discuss and review fossil and nuclear fuel procurement, fuel transportation, environmental compliance costs and procedures, emission allowances, generation plant performance, distributed energy resources, forecasting, and general Company policies and procedures pertaining to fuel procurement. These meetings occurred at ORS offices as well as SCE&G facilities in Cayce, SC. In addition, ORS monitors the nuclear, coal, natural gas, transportation and renewable industries through industry and governmental publications.

# Q. DID ORS EXAMINE THE COMPANY'S PLANT OPERATIONS FOR THE ACTUAL PERIOD?

Yes. ORS reviewed the performance of the Company's generation units to determine if the Company made reasonable efforts to maximize unit availability and minimize fuel costs. ORS also reviewed the operating statistics of the Company's power plants by unit. Exhibit MSH-1 shows, in percentages, the annual availability, capacity, and forced outage factors of the Company's major generation units during the Actual Period. This exhibit also includes the North American Electric Reliability Corporation ("NERC") national five-year (2012-2016) averages for availability, capacity, and forced outage factors for each type of generation plant.

# Q. PLEASE EXPLAIN HOW THE OUTAGES ARE REPRESENTED ON EXHIBITS MSH-2 THROUGH MSH-4.

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Exhibits MSH-2 and MSH-3 summarize outages lasting seven (7) or more days for
major coal and natural gas units during the Actual Period, respectively. While not all plan
outages were included in these exhibits, all outages were reviewed and found to be
reasonable by ORS. Exhibit MSH-4 shows the duration, type and cause of each of the
outages at V.C. Summer. During the Actual Period, there were four (4) separate outages
including one (1) scheduled refueling outage and three (3) forced outages. ORS reviewed
each outage, including associated NRC documents, discussed these outages with Company
management, and determined that the Company responded appropriately. V.C. Summer
operated efficiently with an actual availability factor of 80.81% and an actual capacity
factor of 81.70% during the Actual Period.

#### WHAT WERE THE RESULTS OF YOUR ANALYSIS OF THE COMPANY'S 11 Q. 12 POWER PLANT OPERATIONS FOR THE ACTUAL PERIOD?

ORS's review of the Company's operation of its generation facilities during the Actual Period revealed that the Company made reasonable efforts to maximize unit availability and minimize fuel costs.

#### DID ORS REVIEW THE COMPANY'S GENERATION MIX DURING THE 16 Q. 17 **ACTUAL PERIOD?**

Yes. Exhibit MSH-5 shows the generation mix for the Actual Period by percentage and generation type. As shown in this exhibit, the nuclear, coal, and natural gas plants contributed an average of 18.99%, 34.72% and 33.14%, respectively, of the Company's generation throughout the Actual Period. This equates to approximately 86.85% of the Company's generation for the Actual Period. The remainder of the generation was met through a mix of hydroelectric, renewables, and purchased power.

DID ORS EXAMINE THE COMPANY'S FUEL COSTS ON A PLANT-BY-PLANT

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#### 2 BASIS FOR THE ACTUAL PERIOD?

Yes. Exhibit MSH-6 shows the average fuel costs for the major generation plants on the Company's system for the Actual Period and the megawatt-hours ("MWh") produced by those plants. V.C. Summer generation statistics reflect SCE&G's 2/3 ownership of the plant. The chart shows the lowest average fuel cost of 0.956 cents/kilowatt-hour ("kWh") at V.C. Summer and the highest average fuel cost of 4.331 cents/kWh at McMeekin Station. The Company utilizes economic dispatch which generally requires that the lower cost units be dispatched first.

#### DID ORS REVIEW THE COMPANY'S VARIABLE ENVIRONMENTAL Q. **COMPLIANCE RELATED COSTS?**

ORS reviewed the Company's environmental compliance related costs including allowances for nitrogen oxide ("NO<sub>X</sub>") and sulfur dioxide ("SO<sub>2</sub>") emissions, reagents, and chemicals used in the reduction of these emissions. The use of these chemicals and reagents reduces the Company's NO<sub>X</sub> and SO<sub>2</sub> emissions, and the costs associated with the use of these substances are included in the Company's Adjustment for Fuel and Variable Environmental Costs tariff as provided by the Fuel Clause Statute.

#### HAS ORS REVIEWED THE ACCURACY OF THE COMPANY'S FORECAST? Q.

Yes. As shown in Exhibit MSH-7, the Company's actual MWh sales were 0.97% lower than expected during the Actual Period. Exhibit MSH-8 shows that, on average, the actual fuel costs for the Actual Period were 6.20% lower than the projected monthly fuel costs.

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# WHAT CHANGES DOES THE COMPANY REQUEST TO ITS CURRENTLY APPROVED FACTORS?

Exhibit MSH-9 shows ending period balances of base fuel, environmental and avoided capacity costs, and DERP avoided costs beginning in January 2008. As of December 2017, the Company had a base fuel cumulative under-recovery balance of \$2,355,695, a variable environmental and avoided capacity over-recovery balance of (\$2,272,425), and DERP avoided costs over-recovery balance of (\$1,504,687). As shown on ORS witness Smith's Exhibit GS-5, page 2 of 2, ORS projects the Company to have a base fuel cumulative over-recovery balance of (\$50,536,981), a variable environmental and avoided capacity over-recovery balance of (\$1,051,097), and DERP avoided costs over-recovery balance of (\$479,920) as of April 30, 2018.

SCE&G requests that the Commission allow the Company to maintain the currently approved Base Fuel Component of 2.451 cents/kWh ("Base Fuel Component") for the Forecasted Period. As shown in Company witness EXHIBIT NO. \_\_(AWR-10), this proposed Base Fuel Component is projected to give the Company an under-collected balance of \$1,313,169 as of April 30, 2019. The Company has indicated through its testimony filed in this Docket that it is looking for ways to mitigate rate impacts to its retail electric customers.

The Company has requested to update its Variable Environmental and Avoided Capacity Cost Component ("Environmental and Avoided Capacity Component") and DERP Avoided Cost Component ("DERP Avoided Cost Component") to reflect the Company's forecasted expenses and allocation of these expenses to each class of customer based on its contribution to the Company's summer 2017 demand peak. The proposed

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IMPACT CUSTOMERS' BILLS?
ARE THERE ANY ADDITIONAL FACTORS IN THIS DOCKET THAT WILL
(\$36,633) as of April 30, 2019.
Cost Components are projected to give the Company an over-collected balance of
over-collected balance of (\$3,930) as of April 30, 2019. The proposed DERP Avoided
Environmental and Avoided Capacity Components are projected to give the Company an

- Yes. The Company has included proposed rates related to its DERP incremental expenses. As addressed by ORS witness Johnson, incremental expenses will be recovered as a fixed charge ("DERP Charge") on customers' bills.
- Q. WHAT IS ORS'S POSITION CONCERNING THE COMPANY APPLYING THE
  GAINS FROM THE RECENT SETTLEMENT OF INTEREST RATE SWAPS TO
  OFFSET THE COMPANY'S FUEL COSTS?
- ORS has reviewed the Company's proposal to apply gains from recently settled interest rate swaps to reduce its Base Fuel Component. The Company's proposal is in compliance with Commission Order No. 2013-776 and ORS supports the Company's proposal.
- Q. DID THE COMPANY MAKE REDUCTIONS TO ITS ENVIRONMENTAL
  COMPONENTS DURING THE ACTUAL PERIOD PURSUANT TO
  COMMISSION ORDER NO. 2017-246?
- 20 **A.** No. In Docket No. 2016-373-E, SCE&G filed a petition to defer certain income tax and related costs arising from claims for deductions and credits the Company has made and will continue to make on its federal and state income tax returns. By Order No. 2016-820, the Commission approved the Company's request. In Docket No. 2017-2-E, SCE&G

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	proposed to use the Internal Revenue Service ("IRS") Section 174 deduction claims to
	lower its Environmental Components based on its Accumulated Deferred Income Taxes
	("ADIT") liability balances as of September 30, 2017. The Commission approved the
	Company's proposal in Commission Order No. 2017-246. In reviewing the Company's
	books and records in this Docket, ORS did not find the Company made any adjustments to
	its Environmental Capacity Components during the Actual Period attributed to the IRS
	Section 174 deduction claims.
	DOES ORS RECOMMEND ANY ADJUSTMENTS TO THE FUEL FACTORS
	PROPOSED BY THE COMPANY?
	No. ORS recommends that the Commission approve the Company's current Base
	Fuel Component remain in effect for bills rendered on and after the first billing cycle for
	May 2018, and continue through the last billing cycle for April 2019. Additionally, ORS
	recommends that the Commission approve the Company's proposed Environmental and
	Avoided Capacity Components and DERP Avoided Cost Components for the period of
	May 2018 through April 2019.
	WHAT IMPACT WILL THE PROPOSED CHANGE HAVE ON THE TYPICAL
	AVERAGE MONTHLY BILL OF A RESIDENTIAL CUSTOMER?
	Exhibit MSH-10 is a summary of the proposed fuel factor components for each
	customer class. If approved by the Commission, the rates proposed, including the ORS
	recommended DERP Charge addressed by ORS witness Johnson, would increase the
	average monthly bill for a Residential Customer on Rate 8 using 1,000 kWh from \$147.53

to approximately \$148.25, a net increase of \$0.72 or 0.49%.

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### Q. DOES THIS CONCLUDE YOUR TESTIMONY?

2 **A.** Yes, it does.

## Office of Regulatory Staff

**EXHIBIT MSH-1** 

#### **Power Plant Performance Data**

# South Carolina Electric & Gas Company

Docket No. 2018-2-E

			Actual Period Data			
Plant	Unit	MW Rating	Average Availability Factor (%)	Average Capacity Factor (%)	Average Forced Outage Factor (%)	
Cope		415	91.91	65.59	2.15	
Wateree	1	342	79.58	59.57	1.52	
Wateree	2	342	85.17	59.47	2.54	
Williams		610	63.14	49.01	1.14	
Coal Totals		1,709	79.95	57.24	1.84	
NERC 5-year average (A	ll Coal P	lants)	84.76	56.46	4.67	
McMeekin	1	125	14.75	1.42	0.00	
McMeekin	2	125	88.15	30.81	0.67	
Urquhart	3	96	90.65	13.16	1.13	
Natural Gas Totals		346	64.52	18.38	0.60	
NERC 5-year average (Natural Gas Plants)			82.66	11.77	5.32	
_			0.1.10	=0.01	0.00	
Jasper	1	156	96.43	79.96	0.00	
Jasper	2	164	91.64	76.81	0.00	
Jasper	3	147 385	90.65 98.25	76.41 62.66	0.00	
Jasper Urquhart	5	162	98.25 88.64	62.66 49.68	0.00	
Urquhart	1	64	88.43	60.87	0.23	
Urquhart	6	168	92.03	50.41	0.13	
Urquhart	2	64	91.74	62.56	0.21	
CC <sup>1</sup> Totals		1,310	92.23	64.77	0.08	
NERC 5-year average (CC Plants)			87.68	53.04	2.62	
V.C. Summer	12	966	80.81	81.70	0.65	
Nuclear Totals		966	80.81	81.70	0.65	
NERC 5-year average (A	ll Nuclea	r Plants)	90.28	89.13	2.73	

<sup>&</sup>lt;sup>1</sup> CC designates Combined-Cycle units

 $<sup>^2</sup>$  V.C. Summer Unit Ownership: SCE&G (66.67%) and South Carolina Public Service Authority (33.33%)

# Office of Regulatory Staff

## **Coal Unit Outages - 7 Days or Greater Duration**

South Carolina Electric & Gas Company Docket No. 2018-2-E

Unit	<b>Date Offline</b>	<b>Date Online</b>	Hours	Outage Type	<b>Explanation of Outage</b>
Соре	5/1/17	5/23/17	520.8	Planned	Unit taken offline for a planned Spring outage.
Wateree 1	2/24/17	3/21/17	589.3	Planned	Unit taken offline for a planned Spring outage.
Wateree 1	10/13/17	11/22/17	943.6	Planned	Unit taken offline for a planned Fall outage.
Wateree 2	2/25/17	3/23/17	641.8	Planned	Unit taken offline for a planned Spring outage.
Wateree 2	10/21/17	11/8/17	435.1	Planned	Unit taken offline for a planned Fall outage.
Williams	9/1/17	12/3/17	2,210.6	Planned	Unit taken offline for a planned Fall outage.
Williams <sup>1</sup>	12/3/17	1/19/18	1,128.0	Outage Extension	Scheduled maintenance outage extended due to emergent issues.

<sup>&</sup>lt;sup>1</sup> This outage concluded after the end of the Actual Period.

## Office of Regulatory Staff

## **Natural Gas Unit Outages - 7 Days or Greater Duration**

South Carolina Electric & Gas Company Docket No. 2018-2-E

Unit	Date Offline	Date Online	Hours	Outage Type	Explanation of Outage
					<u>.</u>
Jasper 2	10/27/17	11/18/17	525.8	Planned	Unit taken offline for a planned Fall outage.
Jasper 3	2/26/17	3/25/17	660.6	Planned	Unit taken offline for a planned Spring outage.
Jasper 4	2/26/17	3/17/17	467.1	Planned	Unit taken offline for a planned Spring outage.
McMeekin 1	2/22/17	5/1/17	1,616.0	Planned	Unit taken offline for a planned Spring outage.
McMeekin 1	5/1/17	12/29/17	5,824.3	Outage Extension	Scheduled maintenance outage extended due to emergent issues.
McMeekin 2	3/17/17	4/6/17	479.9	Planned	Unit taken offline for a planned Spring outage.
McMeekin 2	9/22/17	10/13/17	499.6	Planned	Unit taken offline for a planned Fall outage.
Urquhart 1	4/10/17	5/1/17	520.2	Planned	Unit taken offline for a planned Spring outage.
Urquhart 1	11/18/17	12/4/17	397.6	Planned	Unit taken offline for a planned Fall outage.
Urquhart 2	4/15/17	5/7/17	544.3	Planned	Unit taken offline for a planned Spring outage.
Urquhart 3	9/17/17	10/15/17	677.6	Planned	Unit taken offline for a planned Fall outage.
Urquhart 5	4/10/17	4/30/17	493.4	Planned	Unit taken offline for a planned Spring outage.
Urquhart 5	11/18/17	12/4/17	394.0	Planned	Unit taken offline for a planned Fall outage.
Urquhart 6	4/15/17	5/7/17	530.9	Planned	Unit taken offline for a planned Spring outage.

## Office of Regulatory Staff

## **Nuclear Unit Outages**

South Carolina Electric & Gas Company

Docket No. 2018-2-E

## V.C. Summer Nuclear Station

Date Offline	<b>Date Online</b>	Hours	Outage Type	Explanation of Outage	
4/8/17	6/1/17	1,308.0	Planned	Unit taken offline for scheduled refueling.	
6/29/17	7/1/17	57.6	Forced	Unit forced offline due to feedwater flow control valve relay.	
8/28/17	9/8/17	257.5	Forced	Unit forced offline due to damage from lightning strike.	
11/7/17	11/10/17	59.4	Forced	Unit forced offline due to inverter in feedwater pump controls.	

Office of Regulatory Staff Generation Mix (Percentage) South Carolina Electric & Gas Company Docket No. 2018-2-E

						2017	17						
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Average
Nuclear	25.29	27.28	26.26	5.72	0.00	18.57	18.46	17.18	16.48	24.64	23.98	24.04	18.99
Coal	44.49	39.82	29.38	51.29	39.70	39.72	36.70	38.19	27.97	20.80	22.17	26.46	34.72
Natural Gas	23.19	27.20	31.07	30.14	39.45	30.75	32.31	32.90	37.91	36.72	37.69	38.35	33.14
Hydroelectric	1.91	1.58	1.97	2.49	3.15	2.36	2.77	2.20	2.95	1.87	1.45	1.34	2.17
Solar	0.07	0.11	0.12	0.14	0.19	0.27	0.29	0.40	0.57	0.58	0.70	0.92	0.36
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.00	0.00	0.00	0.00
Biomass	2.15	2.50	2.64	2.37	2.11	1.95	1.72	1.34	2.11	2.33	1.69	2.27	2.10
Purchased Power	2.90	1.51	8.56	7.85	15.40	6.38	7.75	7.79	12.01	13.06	12.32	6.62	8.51

Numbers may not equal 100% due to rounding.

# Office of Regulatory Staff

#### **Generation Statistics for Major Plants**

South Carolina Electric & Gas Company Docket No. 2018-2-E

Plant	Fuel Type	Average Fuel Cost (¢/kWh) <sup>1</sup>	Generation (MWh)
V.C. Summer <sup>2</sup>	Nuclear	0.956	4,610,254
Jasper CC	Natural Gas	2.542	5,486,584
Urquhart CC	Natural Gas	2.793	2,187,207
Cope	Coal/Natural Gas	3.357	2,384,567
Williams	Coal	3.373	2,606,561
Urquhart #3	Natural Gas	3.472	110,033
Wateree	Coal	3.500	3,566,446
McMeekin	Natural Gas	4.331	345,141

<sup>&</sup>lt;sup>1</sup> Includes Base Fuel and Environmental Costs.

<sup>&</sup>lt;sup>2</sup> Generation Statistics for V.C. Summer represent SCE&G's 66.67% ownership.

# Comparison of Estimated to Actual Energy Sales South Carolina Electric & Gas Company Docket No. 2018-2-E Office of Regulatory Staff

							2017	17						
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Period Total
[1]	Actual Sales (MWh)	1,901,338	1,600,031	1,901,338 1,600,031 1,698,465 1,614,993 1,878,095 2,122,686 2,201,945 2,311,830 2,086,471 1,934,432 1,617,300 1,782,086	1,614,993	1,878,095	2,122,686	2,201,945	2,311,830	2,086,471	1,934,432	1,617,300	1,782,086	22,749,672
[2]	Estimated Sales (MWh)	2,059,800	1,877,000	2,059,800 1,877,000 1,837,800 1,621,800 1,781	1,621,800	1,781,100	2,091,300	1,100 2,091,300 2,133,800 2,250,900 2,071,300 1,765,900 1,622,900 1,858,700	2,250,900	2,071,300	1,765,900	1,622,900	1,858,700	22,972,300
[3]	Difference [1]-[2]	-158,462	-276,969	-139,335	-6,807	96,995	31,386	68,145	60,930	15,171	168,532	-5,600	-76,614	-222,628
<del>4</del>	Percent Difference [3]/[2]	-7.69%	-14.76%	-7.58%	-0.42%	5.45%	1.50%	3.19%	2.71%	0.73%	9.54%	-0.35%	-4.12%	-0.97%

Office of Regulatory Staff
Comparison of Estimated to Actual Fuel Cost
South Carolina Electric & Gas Company
Docket No. 2018-2-E

						2017	17						
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Period Average
Actual Experience (¢/kWh)	2.7571	2.6156	2.6565	3.3320	3.3288	2.7049	2.8820	2.7454	2.5810	2.4246	2.6882	3.0078	2.8103
Original Projection (¢/kWh)	2.9411	2.6717	2.7208	3.3718	3.5501	3.0415	3.0360	2.9614	2.6677	2.7176	3.1074	3.1657	2.9961
Amount in Base (¢/kWh)	2.4450	2.4450	2.4450	2.4450	2.4510	2.4510	2.4510	2.4510	2.4510	2.4510	2.4510	2.4510	2.4490
Variance from Actual [1-2]/[2]	-6.26%	-2.10%	-2.36%	-1.18%	-6.23%	-11.07%	-5.07%	-7.29%	-3.25%	-10.78%	-13.49%	4.99%	-6.20%

Office of Regulatory Staff EXHIBIT MSH-9

#### History of Cumulative Recovery Accounts

#### South Carolina Electric & Gas Company Docket No. 2018-2-E

Period Ending	(	Base Fuel (Over)/Under	Convironmental & Coverol Capacity (Overol/Under	Avoided Costs er)/Under
January-08	\$	28,848,155	\$ 9,866,854	N/A
December-08	\$	130,199,721	\$ (14,512,678)	N/A
December-09	\$	89,477,296	\$ (13,544,222)	N/A
December-10	\$	76,013,131	\$ (3,180,866)	N/A
December-11	\$	92,791,882	\$ 3,051,203	N/A
December-12	\$	82,500,782	\$ 1,654,373	N/A
December-13	\$	60,307,192	\$ 202,213	N/A
December-14	\$	64,427,701	\$ (277,377)	N/A
December-15	\$	(21,307,142)	\$ (4,359,999)	\$ (2,035)
December-16	\$	(52,599,284)	\$ (3,904,943)	\$ (1,709,001)
December-17	\$	2,355,695	\$ (2,272,425)	\$ (1,504,687)

#### Office of Regulatory Staff Proposed Fuel Factors

South Carolina Electric & Gas Company Docket No. 2018-2-E

# SCE&G Proposed Fuel Factors (¢/kWh)

Customer Class	Base Fuel Component	Environmental Fuel & Avoided Capacity Component	DERP Avoided Cost Component	Total Fuel Factor
Residential	2.451	0.083	0.042	2.576
Small General Service	2.451	0.075	0.038	2.564
Medium General Service	2.451	0.063	0.032	2.546
Large General Service	2.451	0.039	0.019	2.509
Lighting	2.451	0.000	0.000	2.451